

PEREL', Yuriy Grigor'yevich; PAYNBOYM, I.B., red.

[Galilei and contemporary astronomy] Galilei i sovremennaya astronomia. Moskva, Izd-vo "Znanie," 1964. 28 p. (Novoe v zhizni, nauke, tekhnike. IX Seriya: Fizika, matematika, astronomia, no.9) (MIRA 17:5)

PEREL', Yuriy Grigor'yevich; KUKARKIN, B.V., prof., red.; YERPYLEV, N.P.,
red.; KHYUCHKOVA, V.N., tekhn.red.

[Development of ideas about the universe] Razvitie predstavlenii
o vselennoi. Pod red. B.V.Kukarkina. Moskva, Gos.isd-vo fiziko-
matem. lit-ry, 1958. 352 p. (MIRA 12:1)
(Cosmology)

PEREL', Yu.G.

"Discovery of the universe. An outline of the history of
astronomy from its origin to 1956" by Gérard de Vaucouleurs.
Reviewed by Yu.G.Perel'. Astron.zhur. 35 no.4:677-679 J1-Ag '58.
(Astronomy--History) (MIRA 11:9)
(Vaucouleurs, Gérard de)

PEREL', Yu.G.

Calendar and the project of its reform. Priroda 47 no. 7:47-50
Jl '58. (MIRA 11:8)

1. Komissiya istorii astronomii Akademiya Nauk SSSR, Moskva.
(Calendar reform)

AUTHOR: Perel', Yu.G.

26-58-7-7/48

TITLE: The Calendar, Its History and Projected Refinement (Kalendar' i proyekt yego reformy)

PERIODICAL: Priroda, 1958, Nr 7, pp 47-50 (USSR)

ABSTRACT: A survey is given on the development of the calendar among the individual nations in the course of history and the recent suggestions for a correction of the present Gregorian Calendar as submitted again to the UN in 1953 on the initiative of India. The USA is charged with a reactionary attitude with respect to an early introduction of a world calendar.

1. Calendars--Development

Card 1/1

AUTHOR: Perel', Yu.G. (Moscow) SOV-26-58-10-48/51
TITLE: Lunar and Solar Eclipses (Lunnoye i solnechnoye zatmeniya)
PERIODICAL: Priroda, 1958, Nr 10, pp 126-127 (USSR)
ABSTRACT: Data are given on the partial eclipse of the Moon and the
total eclipse of the Sun which will take place in October
1958.
1. Lunar eclipse 2. Solar eclipse

Card 1/1

PEREL', Yu.G.

Plenary session of the committee on astronomical history. Astron.
zhur. 35 no.3:509-512 My-Je 58. (MIRA 11:6)
(Astronomy—History)

PEREL', Yu.G. (Moskva).

Popular scientific literature on astronomy. Priroda 47 no.5:117-119
My '58. (MIRA 11:5)

(Astronomy--Book reviews)

PEREL', Yu.G.

Voltaire's cosmological views. Ist.-astron. issl. no.3:541-550 '57.
(Voltaire--Francois Marie Arouet, 1694-1778) (MIRA 11:3)

AUTHOR: Perel', Yu.G. (Moscow) 26-58-5-46/57
TITLE: Popular Science Literature on Astronomy (Nauchno-populyarnaya literatura po astronomii)
PERIODICAL: Priroda, 1958, Nr 5, pp 117 - 119 (USSR)
ABSTRACT: Seven new pamphlets are listed with short descriptions of each.
AVAILABLE: Library of Congress
Card 1/1 1. Astronomy - Periodicals

PEREL, YU. M.

56-1-19/56

AUTHORS:

Kagan, Yu. M., Perel', V. I.

TITLE:

On the Motion of Ions in a Mixture of Isotopes (O dvizhenii ionov v smesi izotopov).

PERIODICAL:

Zhurnal Eksperimental'noy i Teoreticheskoy Fiziki, 1958, Vol. 34, Nr 1, pp. 126-128 (USSR).

ABSTRACT:

The present paper determines expressions for the drift velocity of the ions of isotopes in an isotope mixture. A pure charge exchange is considered to constitute the basic problem of the interaction of ions with atoms. In connection with the problem of isotope separation in a d.c.-discharge the question of the mobility of an ion in an isotope mixture is of growing interest. Blank's law for the mobility of ions in a mixture does not hold in this case because of the possibility of a change in charge between an ion of one isotope and an atom of another isotope. Here a mixture of two isotopes with concentrations N_1 and N_2 of the neutral atoms is assumed. The concentrations of the ions are said to be N_1 and N_2 and their distribution functions with respect to velocity are denoted by $f_1(v)$ and $f_2(v)$. The influence of the ions on the distribution function of the atoms with respect to the velocity

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56-1-19/56

On the Motion of Ions in a Mixture of Isotopes.

and the interaction of the ions is not taken into consideration here. Assuming the presence of a constant homogeneous electric field (directed along the z-axis), the distribution functions of the ions with respect to the velocity are determined from a system of kinetic equations (which is given here). The authors solve the system of these kinetic equations for the boundary cases of weak and strong fields, they obtain $N_1^+/N_1 = N_2^+/N_2$. The unknown drift velocities are determined from the equations of the balance of momentum. From a formula given here it is possible to determine the limits, within which the ratio of the drift velocities in an isotope mixture varies from $c_2 = 0$ to $c_1 = 0$ at a modification of the concentration. The results obtained here disfavour the widely spread opinion, that an equal drift-velocity is obtained for the ions of either isotope because of frequent changes in charge. The drift velocity of the ion of the lighter isotope is markedly greater than the drift velocity of the ion of the heavier isotope. In many cases, the mixture contains a third component. (e.g. molecules of the isotopes). In this case, the interaction of the ions with the particles of the third component does not have the character of a charge exchange. The kinetic equations then contain additional terms taking into

Card 2/3

On the Motion of Ions in a Mixture of Isotopes.

56-1-19/56

consideration the collisions of the ions of the isotopes with the particles of the third component. In the case of strong fields an accurate result is obtained for the drift velocities. There are 3 references, 2 of which are Slavic.

ASSOCIATION: Leningrad Institute for Precision Mechanics and Optics
(Leningradskiy institut tochnoy mekhaniki i optiki).

SUBMITTED: July 12, 1957

AVAILABLE: Library of Congress

Card 3/3

Perel, Yu. G.

PLATE 1 BOOK EXPLANATION

507/3651

Vsesoyuznyy astronomicheskyy zhurnal
Astronomicheskyy kalendary' 1960 (Astronomical Calendar, 1960) Moscow,
Pis'ma, 1959, 351 p. (Series: Izd. Yezhegodniki peremennyykh
zvezd', 979, 63) 7,200 copies printed.

Ed.: I. Ye. Bakhurin, Tech. Ed.: S. S. Abramov, Editorial Board: P. I.
Bakhurin (Chair), N. M. Degtyev, S. G. Kulevskiy, A. G. Maslennikov, P. F.
Pavlov.

Summary: The book is intended for astronomers and geophysicists and
physicists interested in astronomical phenomena.

CONTENTS: This yearbook on astronomy was compiled by a number of Soviet
astronomers specializing in different branches of astronomy.
The following persons participated in the work: L. D. Kobzarevskiy, who
wrote the chapters on eclipses of the Sun and Moon; N. M. Degtyev,
who wrote the chapters on comets, asteroids, and meteorites; S. G. Kulevskiy,
who wrote the chapters on the atmosphere and heliophysics; I. Ye. Bakhurin,
who wrote the chapters on the Moon, observations of planets and comets; S. S. Abramov,
who wrote the chapters on the planets of the Solar System; and P. I. Bakhurin,
who wrote the chapters on the planets of the Solar System and on the planets
of other stars. The book also contains a number of tables and diagrams.
The book is intended for astronomers and geophysicists and
physicists interested in astronomical phenomena.

Frank-Kamenetskiy, D. I. Discussion on the Origin of Elements

Lyulin, G. A. Symposium on the Herzsprung-Russell Diagram

Shenoy, P. V. Electron Telescopes

Bronk, J. A. J. The Fifth Assembly of the Special Committee on the Inter-
national Geophysical Year

Maslennikov, A. G. Visit to Observatories in the United States

Smolin, M. E. The People's Observatory of the Planet Island Librarian

Sakharov, L. I. "Tselnyy" Calendar with Table of Lunar Phases

Perel, Yu. G. 50th Anniversary of Galileo's Discoveries with the Tele-
scope

Perel, Yu. G. Anniversary in Soviet and World Astronomy in 1960

Bibliography (compiled by Yu. G. Perel)

AVAILABLE: Library of Congress

237
220
227
232
262
264
292
308
310
330
7

KOTEL'NIKOV, B.P., inzh.; BOZHENOVA, N.I., inzh; PEREL', Z.P., inzh.;
ZAVISTOVSKAYA, M.D., inzh.

Rapid method for determining the content of sodium sulfate in
washing pastes and in the "Novost'" powder. Masl.-zhir. prom. 25
no.7:42-43 '59. (MIRA 12:12)

1. Shebekinskiy kombinat sinteticheskikh shirnykh kislot i shirnykh
spirtov.
(Washing powders--Analysis) (Sodium sulfates)

PERELADOVA, O. L.

"Functional State of the Higher Divisions of the Central Nervous System in
Brochopneumonia in Infants." (Dissertation for Degree of Candidate for Medical
Sciences) Kiev Order of Labor Red Banner Medical Inst imeni Academician A. A. Bogomolets,
Kiev, 1954

SO: M-1036 28 Mar 56

PERELATOV, V.D.

Hemorrhagic fever in Rostov Province. Zhur. mikrobiol., epid. i
immun. 41 no.12:117-118 D '64. (MIRA 18:3)

1. Rostovskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.

PERELATOV, V.D.; URAZAYEV, N.M., red.; AKULOV, A.N., red.;
VATNIK, P.M., red.; D'YACHKOVA, N.G., red.; KASPAROV,
A.A., red.; LITVINOV, N.N., red.

[Work experience of the Rostov Public Health Station in
rural areas under the conditions of enlarged districts]
Opyt raboty Rostovskoi sanepidstantsii na selsk-
vialakh ukrapnenykh rayon v. Moskva: Meditsina, 1964. 9 f.
(MIRA 18:7)

GOSTEV, V.S. (Moskva, D-284, Begovaya u., 11, kv. 37); AZLETSKAYA, A.Ye.;
SAAKOV, A.K.; GRIGOR'YAN, D.G.; CHAMOVA, K.G.; ZYKOV, Yu.V.;
PERELAZNYY, A.A.; MAZINA, N.M.; KULAGIN, N.A.; MAKOVEYEVA, G.M.

Study of the antigenic properties of human tumors fractions
deprived of soluble proteins. Vop. onk. 8 no.9:18-26 '62.
(MIRA 17:6)

1. Iz laboratorii immunokhimii Instituta eksperimental'noy
biologii AMN SSSR (dir.- prof. I.N. Mayskiy).

GOSTEV, V.S.; SAAKOV, A.K.; AZLETSKAYA, A.Ye.; PERELAZNYY, A.A.; NAZARENKO, N.A.; MAZINA, N.M.; KULAGIN, A.N.; ZYKOV, Yu.V.; NIKITENKO, A.A.; SKACHEV, N.I.

Comparative immunochemical study of antisera to tissue homogenates and the mixtures of their nonprotein fractions. Biul. eksp. biol. i med. 57 no.4:94-97 Ap '64. (MIRA 18:3)

1. Laboratoriya immunokhimii (zav. - prof. V.S. Gostev) Instituta eksperimental'noy biologii (dir. - prof. I.N. Mayskiy) AMN SSSR, Moskva. Submitted May 17, 1963.

PEREL'BERG, I.

Analysis of the profitability of an industrial enterprise.

Den. i kred. 17 no.11:76-82 N '59.

(MIRA 12:12)

(Profit) (Industrial management)

SHEVCHUK, I.P., kand.ekon.nauk, dots.; MAKARENKO, P.P., kand. ekon. nauk;
STAROVEROVA, V.V., kand.ekon. nauk; KUFUDAKI, V.I., assistant;
LEMESHENKO, D.D., assistant; PUSHKO, D.S., kand.ekon. nauk; PILENKO,
I.F., kand. ekon. nauk; PEREL'BERG, I.L., starshiy prepodavatel';
BOL'FOY, G.T.; KACHANOVA, N., red.; GORYACHENKO, F., tekhn. red.

[Business accounting within individual production units in operation; practice in introducing business accounting in individual production units of the V.I.Lenin Collective Farm, Bendery District]
Vnutrikhoziaistvennyi raschet v deistvii; opyt vnedreniia vmutrikhoziaistvennogo rascheta v kolkhoze im. V.I.Lenina Benderskogo raiona. Kishinev, Izd-vo sel'khoz.lit-ry MSKh MSSR, 1962. 211 p.
(MIRA 1516)

1. Zaveduyushchiy kafedroy ekonomiki i organizatsii sotsialisticheskikh sel'skokhozyaystvennykh predpriyatiy Kishinevskogo sel'skokhozyaystvennogo instituta (for Shevchuk). 2. Predsedatel' kolkhoza im. V.I.Lenina Benderskogo rayona (for Bol'foy).
(Bendery District--Collective farms--Finance)

PERKIN, A.L.

Problems for the practical part of the methodological course of mathematical instruction at the physics and mathematics faculty of the pedagogical Institute. Part 1. Uzb. rep. Tashk. gos. ped. inst. 37 no. 197-198: 163.

Problems for the practical part of the methodological course of mathematical instruction at the physics and mathematics faculty of the pedagogical Institute. Part 2. Ibid. 38: 94-97 (1979: 17:10)

PEREL'DIK, D.L.

Features of the clinical aspects and treatment of pyoderma bullosa.
Vest. derm. i ven. 32 no.2:83 M-Ap '58. (MIRA 11:4)

1. Iz Dnepropetrovskogo oblastnogo kozhno-venerologicheskogo
dispansera,
(SKIN--DISEASES)

PEREL'DIK, D.L.; DATSENKO, V.P.

Use of epilin in the treatment of mycosis in children with a past history of central nervous system diseases. Vest. dermat. i ven. 38, no.3:53-56 Mr '64. (MIRA 18:4)

1. Dnepropetrovskiy oblastnoy kozhno-venerologicheskoy dispensariy (glavnyy vrach M.I.Prokhorenko).

PEREL'DIK, D.L.; BRODSKAYA, F.M.

**Mycoflora of Dnepropetrovsk Province. Vest.derm.i ven. 31 no.3:
50-51 My-Je '57. (MIRA 10:11)**

**1. Is Dnepropetrovskogo oblastnogo kozhno-venerologicheskogo
dispansera.**

(DNEPROPETROVSK PROVINCE--FUNGI, PATHOGENIC)

PEREL'DIK, D.L.

Cutaneous blastomycosis of the scalp. Vest.ven.i derm. no.4:61 J1-4g '53.
(MLA 6:9)

1. Dnepropetrovskiy oblastnoy kozhno-venerologicheskoy dispanser.
(Scalp--Diseases)

PEREL'DIK, D.L.

Pyogenic osteopathy. Vest.ven.i derm. no.2:57 Mr-Ap '54. (MLRA 7:4)

1. Iz Dnepropetrovskogo oblastnogo kozhno-venerologicheskogo dispansera.
(Bones--Diseases)

PEREL'DIK, D. L.

Epiarticular pulvinate thickenings of the skin of the fingers.
Vest. dermat. i ven. no. 10:15-19 '61. (MIRA 14:12)

1. Iz Dnepropetrovskogo oblastnogo kozhno-venerologicheskogo
dispansera (glavnyy vrach M. I. Prokhorenko).

(FINGERS—DISEASES)

PEREL'DIK, D.L.

Toxicoderma caused by peroral use of furacilin. Vrach. delo no.8:
114-115, Ag '60. (MIRA 13:9)

1. Dn ropetrovskiy oblastnoy kozhno-venerologicheskoy dispanser.
(SKIN--DISEASES) (FURACILIN)

PEREL'DIK, D.L.; KHOL'NIKOVA, M.I.

Streptomycin therapy for tuberculosis of the skin. Vest. ven. i
derm. no.1:44 Ja-Y '55. (MIRA 8:4)

1. Iz Dnepropetrovskogo oblastnogo kozhno-venerologicheskogo dispen-
saria.

(STREPTOMYCIN) (SKIN--TUBERCULOSIS)

PEREL'DIK, D.L.

Increased sensitivity of the skin to penicillin under the influence
of the fungus *Microsporon furfur*. Vest. dermat. i ven. 34 no.7:52-
53 '60. (MIRA 13:12)

(PENICILLIN) (SKIN--DISEASES)
(MICROSPORUM)

PEREL'DIK, E.N. (Moskva)

Stability of a certain class of nonlinear controlled systems.
Izv. AN SSSR Otd. tekhn. nauk. Mekh. i mashinostr. no.2:138-
142 Mr-Ap '63. (Automatic control) (MIRA 16:6)

L 10145-63

EWI(d)/BDS--AFFTC/ASD/APGC--Pg-4/Pk-4/Pl-4/Po-4/Pq-4--EC

ACCESSION NO: AP3000891

8/0179/63/000/002/0138/0142

AUTHOR: Perel'dik, E. N. (Moscow)

TITLE: On the stability of one class of nonlinear control systems 73
72

SOURCE: AN SSSR. Izv. Otd. tekhn. nauk. Mekhanika i mashinostroyeniye, no. 2, 1963, 138-142

TOPIC TAGS: control systems, nonlinear control systems, stability, Lyapunov function.

ABSTRACT: This theoretical paper determines the stability boundaries in the space of the parameters of a regulator for a nonlinear control system described by A. I. Lur'ye's equations (in the book "Nekotoryye nelineynyye zadachi teorii avtomaticheskogo regulirovaniya - Some nonlinear problems of the theory of automatic control systems," Gostekhizdat, 1951) for the following two conditions: (a) When the control function, $f(\sigma)$, is a continuous function which has a unique solution for any prescribed initial given values in the Lur'ye equations, and (b) when the function $f(\sigma)$ satisfies the conditions $f(0)=0$ and $\sigma \cdot f(\sigma)$ greater than zero for σ not equal to zero, and (c) when the modulus

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L 10145-63
ACCESSION NR: AP3000891

of $f(\sigma)$ is at all times smaller than a prescribed constant A . Solutions are sought, first, for negative real and distinct roots, and then for complex conjugate roots with a negative real part. It is demonstrated that the Lyapunov function will decrease with time, no matter how small its value might be, and that an unperturbed motion is stable in an asymptotic sense. A numerical example is worked out. "In conclusion I express my gratitude to my director, Ya. N. Roytenberg." There are 35 numbered equations and 1 figure.

ASSOCIATION: none

SUBMITTED: 21Feb62

DATE ACQ: 12Jun63

ENCL: 00

SUB CODE: CG,MM

NR REF SOV: 006

OTHER: 000

Card

2/2

PEREL'DIK, N. SH.

42514 Podgotovka Zverey K Gonu. Karakulevodstvo I zverovodstvo, 1948, No. 6,
s. 50-53.

PEREL'DIN, N. Sh.

PEREL'DIN, N. Sh. and POKHOROVA, N. T. "The experience in feeding silver-black foxes with small rations of animal feed," Karakulevodstvo i zverovodstvo, 1949, No. 3, p. 44-51

SO: U-5240, 17, Dec. 53, (Letopis 'Zhurnal Statey, No. 25, 1949).

FEREL'DIK, N. SH.

24199 FEREL'DIK, N. SH. Podsolnechnikovyy zhnykh kak zamenitel' myasa pri kontlenii
lisits. Karakulevodstvo i zverovodstvo, 1949, No. 4, S. 47-53.

SO: Letopis, No. 32, 1949.

PEREL'DIK, N. Sh.

25864. PEREL'DIK, N. Sh. Eliyanie razlichnykh preparatov sery na rost shersti u krolikov. Trudy Vsesoyuz. nauch.-issled. in-ta zhivotnovodstva, t. XVI, 1949, S. 53-77.—Bibliogr: 6 nazv.

So. Ietopis' Zhurnal'nykh Statey, Vol. 34, Moskva, 1949

PEREL'DIK, N. Sh.
RELYAYEV, D.K.; PEREL'DIK, N. Sh.; PORTNOVA, N.T.

Experimental reduction of the embryonal development period of
sables *Martes sibirica* L. Zh. obsh. biol. 12 no.4:260-265
July-Aug 1951. (CML 20:11)

1. Central Scientific-Research Laboratory for the Growing of
Fur-Bearing Animals of the Ministry of Sovkhozes USSR.

Name: PEREL'DIK, Nokhim Shlemovich

Dissertation: Influence of feeding on the reproductive functions of the female of fur-bearing animals of the families Canidae and Mustelidae

Degree: Doc Agr Sci

Affiliation: All-Union Sci-Research Laboratory of Fur-bearing Animal Raising and "pentovoy" Reindeer Raising

Defense Date, Place: 23 Dec 56

Certification Date: 15 Jun 57

Source: BLVO 17/57

ABRAMOV, N.D., redaktor; APANAS'YEV, V.A., redaktor; PEREL'DIK, N.Sh.,
redaktor; NECHAYEVA, Ye.G., redaktor; FEDOTOVA, A.F., tekhnicheskii
redaktor

[Raising fur-bearing animals] Zvedrovodstvo. Izd. 2-oe, perer. 1
dep. Moskva, Gos. izd-vo selkhoz. lit-ry, 1956. 615 p. (MLRA 9:9)
(Fur-bearing animals)

PEREL'DIK, N. SH

USSR / Farm Animals. Wild Animals.

U-8

Abs Jour : Ref Zhur - Biologiya, No 16, 1957, 72134

Author : Perel'dik, N.Sh.

Title : Well-Balanced Feed, the Basis of a High Productivity of Fur-Bearing Animals.

Orig Pub : Karakulevodstvo i Zverovodstvo, 1956, No 5, 30-34.

Abstract : Groups of Silver black foxes received from the 15th of June to the 1st of September the following daily rations: the 1st group, 550 K calories and 54 g of protein; the 2nd group, 547 K cal and 36.6 gm of protein, and the 3rd group, 690 K cal and 46.2 gm of protein. Pups per female: first group, 4.5; 2nd group, 3.62; the third, 4.26. It is concluded that the increase in protein feeding during the summer months (after nursing is over) is favorable to the fertility of the vixen. During autumn months (IXOXI), the feeding should promote the storage of fat and the growth of fur. The analysis of feed is given in the animal sovkholes and the fertility of females is cited.

Card : 1/1

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PEREL'DIK, N. Sh.

USSR / Farm Animals. Wild Animals.

Q-4

Abs Jour : Ref Zhur- Biol., No 10, 1958, No 45268

Author : Perel'dik, N. Sh.; Titova, M. I.; Pobedin, V. I.

Inst : Not given

Title : The Utilization of the Soybean Oil Meal as a Feed for Silver-Black Foxes.

Orig Pub : Karakulevodstvo i zverovodstvo, 1957, No. 2, 22-26

Abstract : The possibility of substituting 40% of meat by soybean oil meal in the rations fed to silver-black foxes during the summer-fall period was established. In winter and during the two-month period preceding the oestrus, as well as during pregnancy, 20% of meat can be substituted. In the case of the growing foxes, the substitution may amount to 67%. According to the author's data, when the silver-black foxes are fed an increased amount of soybean oil meal, a higher level of nutrition must be maintained than when the foxes are fed animal feeds, and the rations should be enriched by all the required vitamins.

Card 1/1

USSR / Farm Animals. Wild Animals.

Q-4

Abs Jour : Ref hur - Biol., No 10, 1958, No 45246

Author : Perel'dik, N. Sh.; Argutinskaya, S. V.; Krasnov, A. M.;
Bobrov, Ye. P.

Title : The Feeding of Fur-Bearing Animals with Acid-Preserved Fish
Feeds.

Orig Pub : Karakulevodstvo i zverovodstvo, 1957, No. 4, 33-38

Abstract : In two experiments in feeding fish to young foxes and mink, carried out from both the scientific and economic viewpoint, it was established that fish preserved by sulfuric acid and neutralized by chalk can be fed to the pup foxes up to 45%, and to the young mink up to 30%, of the total nutritiousness of the aggregate group of the meat-fish feeds, without harm to the health of the animals and detriment to the quality of their fur. The fish and fish waste preserved by formic

Card 1/2

PADUCHEVA, A.L. (Moskva, A-83, ul.8 marta,3,korp.6,komn.5); PEREL'DIK, N.Sh.
(Moskva, A-83, ul.8 marta, 3a, kv.1); SHAPOVALOVA, M.Ya. (Moskva,
D-80, Peschanaya ul., 40/1,kv.326)

Utilization of organic and inorganic sulfur compounds in fur-bearing
animals (mink and fox) for hair production; a study with labeled sulfur.
Ark. anat., gist. i embr. 42 no.3:84-91 Mr '62. (MIRA 15:5)

1. Laboratoriya biokhimii (zav. - I.Yu.Fridlyand) Vsesoyuznogo nauchno-
issledovatel'skogo instituta zhivotnovodstva i Otdel kormleniya (zav. -
doktor sel'skokhozyaystvennykh nauk N.Sh.Perel'dik) Nauchno-issledovatel's-
skogo instituta pushnogo zverovodstva i ko'olikovodstva.
(SULFUR METABOLISM) (HAIR)

40248-66 EWT(a)/EWT(1)/EWP(v)/EWP(k)/EWP(h)/EWP(1) PC

ACC NR: AP6021364

SOURCE CODE: UR/0423/65/000/010/0009/0012

AUTHOR: Perelekhov, Yu. A.

ORG: "Neftekhimavtomat" Scientific-Research and Design Institute (Nauchno-issledovatel'skiy i proyektnyy institut "Neftekhimavtomat")

TITLE: Analysis of digital display methods in industrial remote control

SOURCE: Za tekhnicheskoy progress, no. 10, 1965, 9-12

TOPIC TAGS: industrial automation, remote control, remote control system, digital system, circuit design

ABSTRACT: Practical problems of switching and power source for digital display are analyzed, and control units for two types in use are studied. The first type uses individual incandescent displays with decimal input, and the second has a multielement display of 7 or 8 cold-cathode or electroluminescent elements requiring a 220-V, 400-cps power source. Control circuits have features common to both, based on binary decade circuitry made up of semiconductor triggers operating on "2 X 5" distribution principle; trigger outputs are fed to oscillators or relays. For sequential or multiple display, input registers are employed in the control circuit. A light source is maintained in the "on" condition until the oscillator operation is killed.

Cord 1/2

UDC: 621.398:53.085.4.001.5

L 40248-66

ACC NR: AP6021364

This may be accomplished by the use of cold-cathode lamps connected through wave-shaping circuits. In this case a common supply signal is used, while the control circuit operates to blank out unused elements. Orig. art. has: 6 figures and 2 tables.

SUB CODE: 09,13/ SUBM DATE: 00/ ORIG REF: 006/ OTH REF: 000

Cord 2/2 MLP

$$\rho(r) = C(T) \exp \left[-\frac{1}{kT} \int_{-\infty}^{\infty} K(|r-r'|) \rho(r') dr' \right]$$

Here ρ is the spatial density distribution of the particles, $K(|r-r'|)$ is their energy of interaction, k is Boltzmann's constant, T the absolute temperature and $C(T)$ a normalizing factor dependent on T . Vlasov has shown [loc. cit.] that as $T \rightarrow 0$ in an infinite cubic lattice the above equation has only periodic solutions with the period of the lattice. An increase of T leads to the broadening of the maxima of these periodic solutions. Vlasov has also said to have shown [Vestnik Moskov. Univ. 1945, no. 3-4, 63 ff.] that at higher temperatures in addition to this by finding new solutions appear which do not have the periodicity of the lattice. The present paper shows that there are periodic solutions appear in a discontinuous manner as the temperature rises above a certain minimum value estimated to be about a tenth of the temperature of fusion.

G. M. Volkoff.

Vol 10, No. 1

Source: Mathematical Reviews,

PERELESIN, R., inzh.-tekhnolog

In the far away Chukchi region. Obshchestv.pit. no.16:5-6
0 '62. (MIRA 15:11)
(Chukchi Peninsula--Restaurants, lunchrooms, etc.)

PERELESIN, R.S., inzh.

Underground cold storage in permafrost soils. Khol.tekh. 39 no.4:20-22
J1-Ag '62. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut trgovogo mashinostro-
yeniya.

FERELESIN, R.S., inzh.

Underground cold storage in permafrost soils. Khol.tekh. 39 no.4:20-22
Jl-Ag '62. (MIRA 17:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut trgovogo mashinostro-
yeniya.

PERMUSHIN, Sergey Dmitriyevich; SILIN, V.N., redaktor; MULIN, Ye.V.,
tekhnicheskiy redaktor

[Basic problems of commercial hunting in the U.S.S.R.] Osnovnye
voprosy okhotnich'ego khoziaistva SSSR. [Moskva] Izd-vo Moskovskogo
univ., 1956. 197 p. (MLRA 9:8)
(Hunting)

VORONOV, V.G.; NIKOLAYEV, A.M.; PERELESIN, S.D.

Sea otters of Urup Island. Soob. Sakhal. kompl. nauch.-issl.
inst. AN SSSR no.4:53-73 '56. (MIRA 11:5)
(Urup Island--Sea otters)

PERELSHIN, S.D.

Itatsi (*Mustela itatsi* Temminck), a peculiar animal of southern Sakhalin. Biul. NOIP. Otd. biol. 62 no.6:67-68 N-D '57. (MIRA 11:1)
(Sakhalin--Weasels)

PERELESHINA, Alina Petrovna, kandidat fiziko-matematicheskikh nauk;
UDAL'TSOV, A.N., glavnyy redaktor; TOLCHINSKIY, Ye.M., inzhener,
redaktor.

[Thermistors used as measuring instruments] Termistory-izmeritel'nye
pribory. Tema 4, no.P-56-472. Moskva, Filial Vses.in-ta nauchn. i
tekh.informatsii, 1956. 9 p. (MLRA 10:5)
(Thermistors)

BORISOV, M.B., redaktor; ~~PEREL'SHINA, A.P.~~, redaktor; VILLENNEVA, A.V.,
tekhnicheskii redaktor

[Industrial chemistry and metallurgy of beryllium and its alloys;
collection of translations] Khimicheskaya tekhnologiya i metallurgiya
berillia i ego spлавov; sbornik perevodov. Moskva, Izd-vo inostran-
noi lit-ry. Pt.2. 1953. 188 p. (MIRA 8:3)
(Beryllium)

S/885/62/000/000/035/035
D234/D308

AUTHOR: Pereleshina, A. P.

TITLE: Thermal and electrical properties of various semiconducting compounds used in thermometry

SOURCE: Akademiya nauk SSSR. Energeticheskiy institut. Fizicheskaya gazodinamika, teploobmen i termodinamika gazov vysokikh temperatur. Moscow, Izd-vo AN SSSR, 1952, 304-310

TEXT: The author has established that the empirical dependence of the resistance of a semiconductor on temperature is

$$R_t = R_0 + R_1 \exp(E/RT) \quad (1)$$

E being the activation energy and R the gas constant. Special cases of Fe_2O_3 and AgCl are discussed taking into account the chemical processes, and theoretical relations are obtained which agree with (1). Theoretical and experimental activation energies of

Card 1/2

Thermal and electrical ...

S/885/62/000/000/035/035
D234/D308

MnO₂, Ag₂S, CuO, NiO and AlO(OH) in addition to those of Fe₂O₃ and AgCl are tabulated. Thermal conductivity of CdO and SiC was found to increase linearly with temperature, that of other semiconductors remained constant. Conclusion: Thermistors made of Fe₂O₃, NiO, Co₃O₄, CuO, AlO(OH) provide an accuracy of 1/1000 deg in temperature measurements between 0° and 800°C. There are 7 figures and 1 table.

Card 2/2

80290

S/170/60/003/04/21/027
B007/B102

24.7600

AUTHOR: Pereleshina, A. P.

TITLE: On the Results of an Experimental Investigation of the Thermo-electromotive Force in Thermistors

PERIODICAL: Inzhenerno-fizicheskiy zhurnal, 1960, Vol. 3, No. 4, pp. 119-122

TEXT: The present paper describes an experimental determination of the coefficients of heat conductivity λ_x and of the corresponding mean temperature T_{mean} for semiconductive thermistor material of various composition (Table 1). λ_x was determined by comparison with the heat conduction of a certain sample body through which a parallel heat flow passed. In the case of equal (accuracy up to 3-5%) temperature gradients in the copper cylinders serving as sample bodies between which the thermistor was fixed it could be estimated whether the heat flow through the whole system of bodies investigated was uniform or not (Refs. 1,2). The table shows that in the temperature range investigated the heat conduction values of all semiconductor compounds used in producing thermistors remained constant. The dependence of the thermoelectromotive force $\mathcal{E}$ (which arises when

Card 1/3

80290

On the Results of an Experimental Investigation of the Thermoelectromotive Force in Thermistors

S/170/60/003/04/21/027
B007/B102

a heat flow passes through the thermistor) on the temperature gradient ΔT_x caused by the flow at the boundaries of the semiconductive layer was determined for all samples in stabilized mode of operation. The experimental data obtained in the investigation of the thermoelectric properties of thermistors are shown in table 2. It can be seen that for thermistors made of silver sulfide, silver chloride, copper oxide, and manganese oxide the function $\epsilon = \epsilon(\Delta T_x)$ is linear: formula (1). Fig. 1 shows that the dependence of the temperature coefficient β of the thermoelectromotive force on the coefficient of heat conductivity λ_x is determined by formula (2). Comparison between formula (1) and (2) shows that the thermoelectromotive force ϵ of the thermistors made of silver sulfide, silver chloride, copper oxide, and manganese oxide is a linear function of the heat flow q flowing through. Thus, such thermistors are very convenient for direct heat flow measurement. A theoretical explanation is given for the experimental data, viz. for the case in which the thermistors investigated are regarded as solid electrolytes. It is shown that the thermistors made of $AgCl$, Ag_2S , CuO , MnO_2 , and Mn_2O_3 have electrolytic conductivity and can therefore be used for direct heat flow measurement. A. S. Predvoditelev, Professor, Corresponding Member of the AS USSR, supervised the investigation described. There are 2 figures,

Card 2/3

On the Results of an Experimental Investigation of the
Thermoelectromotive Force in Thermistors

80290
S/170/60/003/04/21/027
B007/B102

2 tables, and 4 references, 3 of which are Soviet.

ASSOCIATION: Energeticheskiy institut im. G. M. Krzhizhanovskogo, g. Moskva
(Institute of Power Engineering imeni G. M. Krzhizhanovskiy, City
of Moscow)

Card 3/3

PERELESHINA, A.V.

BORISOV, M.B., redaktor; PERELESHINA, A.P., redaktor; VILLENNEVA, A.V.,
tekhnicheskii redaktor

[Industrial chemistry and metallurgy of beryllium and its alloys;
collection of translations] Khimicheskaya tekhnologiya i metallurgiya
berillia i ego splovov; sbornik perevodov. Moskva, Izd-vo inostran-
noi lit-ry. Pt.2. 1953. 188 p. (MIRA 8:3)
(Beryllium)

L 20811-65 EWT(1)/EMG(k)/EWT(m)/EPR/T/IEC(b)-2 Pz-6/Ps-4 IJP(c)/SSD/ASD(a)-5/
 PWL/ESD(c) AT/WH/MLK 8/0000/64/000/000/0214/0211
 ACCESSION NR: AT4048023

AUTHOR: Pereleshina, A. P.

TITLE: Electrical and thermal properties of thermistor-solid electrolytes BT1

SOURCE: AN SSSR. Energeticheskiy institut. Fizicheskaya gazodinamika i svoystva gazov pri vysookikh temperaturakh (Physical gas dynamics and properties of gases at high temperatures). Moscow, Izd-vo Nauka, 1964, 214-221

TOPIC TAGS: solid electrolyte, thermistor, thermistor thermal property, thermistor electrical property, transistor, polarization voltage, thermoelectromotive force 21

ABSTRACT: The paper describes a continuation of experimental studies of the properties of thermistors, previously shown to be solid electrolytes in which chemical reactions resulting from heating give rise to thermal currents. The present paper shows that the exponential temperature dependence of the resistance, previously discovered, holds for a wide temperature range for disk-type MgO, Fe(OH)₃ and Ni(OH)₂ transistors with copper contacts. The chemical reactions involved are detailed and the activation energies are calculated for the three materials, good agreement being obtained between the value given by the law of mass-action and the experimental values. The dependence of the activation

Card 1/2

L 20814-65

ACCESSION NR: AT4048023

energy on the nature of the contact material was then confirmed by making CuO thermistors with copper, zinc or no electrodes. For an AgCl sample with an Ag₂O surface film there was a jump in both activation energy and in resistance at 60C, due to expulsion of oxygen from the surface film. To verify the electrolytic character of thermistor conductivity, the polarization voltage was measured as a function of time and the behavior was found to be governed by the same equation as for liquid electrolytes. The thermal emf for various thermistor-systems was measured and shown to be linear, since it is due to the finite temperature difference at the edges of the semiconducting substance. Orig. art. has: 1 table, 8 figures and 13 equations.

ASSOCIATION: Energeticheskoy Institut AN SSSR (Power Engineering Institute, AN SSSR)

SUBMITTED: 06Mar64

ENCL: 00

SUB CODE: EM, GP

NO REF SOV: 005

OTHER: 001

Card 2/2

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~~PERMIT, G.I.~~

Convection problem in the free atmosphere. Trudy OGMI no.11:199-203
'57. (MIRA 11:3)

(Atmosphere)

AID P - 3867

Subject : USSR/Meteorology
 Card 1/1 Pub. 71-a - 30/35
 Authors : But, I. V., G. I. Perelet, and L. I. Sakali
 Title : Pavel Ludvigovich Tomashevich
 Periodical : Met. i. gidr., 6, 62, N/D 1955
 Abstract : An obituary of the oldest Ukrainian weatherman, Tomashevich, who worked in Kiev on meteorology and climatology, was a professor at the Khar'kov Hydro-meteorological Institute, and died in June 1955.
 Institution : None
 Submitted : No date

USSR/Physics of the Atmosphere - Dynamic Meteorology, M-2

Abstract: ~~APPROVED FOR RELEASE: 06/15/2000~~ 1956, No 12, 3683
 CIA-RDP86-00513R001240010007-6"

Author: But, I. V., Perelet, G. I.

Institution: None

Title: Concerning the Problem of the Dynamics of the Dry Wind and the Possible Role of Vertical Velocities in the Development of the Dry Wind

Original
 Periodical: Tr. Odessk. gidrometeorol. in-ta, 1955, No 7, 23-29

Abstract: The appearance of the dry-wind effect (sharp reduction in the relative humidity during daylight hours) at very initial period of the anticyclogenesis may be due to the effect of the downward motion in the lower 1.5-km layer of the troposphere. During night hours this effect is masked owing to the radiation cooling of the surface layer. Upon further development of the anticyclone, the role of the downward stream in its influence on the field of the relative humidity is completely blanketed by an intensive transformation under the influence of the underlining surface.

Card 1/1

PERELMAN, G.I.; PRIKHODKO, G.F.

Some problems in the theory of artificial precipitation of stratus
and stratocumulus clouds. Trudy UkrNIIGMI no.17:3-15 '59.

(MIRA 13:12)

(Weather control)

PERRLET, G.I.

Nature of daily blocking layers near the ground over Odessa. Trudy
UkrNIGMI no.17:40-49 '59. (MIRA 13:12)
(Odessa region--Meteorology)

BUT, I.V.; PERELET, G.I.; SAKALI, L.I.

Pavel Liudvigovich Tomashevich; obituary. Meteor. i gidrol.
no.6:62 N-D '55. (MLRA 9:2)
(Tomashevich, Pavel Liudvigovich, 1890-1955)

FERELET, G. I. and BURMAN, E. A.

"Certain Characteristics of Evaporation From Various Underlying Surfaces".
Meteorol. i gidrologiya, No 5, pp 33-36, 1954.

The influence of irrigation and character of the underlying surface upon evaporation is investigated on the basis of data obtained by an expedition of the Odessa Hydrometeorological Institute conducting observations on the fields of the Michurin kolkhoz (Odesskaya Oblast), evaporation being determined by the method of heat balance at two places: irrigated (black fallow) and nonirrigated (beet field). For this purpose measurements were made in a course of 3 days in July 1953 of the temperature of the air and soil, wind, direct and scattered radiation, and albedo; on these days the region under study was under the influence of a slightly mobile anticyclone. It was established that evaporation from the black fallow was considerably less than the evaporation from the beet field, the difference increasing with the drying of the soil. (RZhGeol, No 8, 1955)

SO: Sum No 884, 9 Apr 1956

KONSTANTINOV, A.R.; SAMPIL, I.I.; PERELLET, N.A.

Heat exchange regime in the soil in the Ukraine and Moldavia.
Trudy UkrNIGMI no.40750-69 '64. (MIRA 1877)

ACC NR: AT6031970 N) SOURCE CODE: UR/3199/66/000/015/0031/0043

AUTHOR: Goysa, N. I., Zheleznyakova, T. V.; Perelet, N. A.

CRG: none

TITLE: Some sources of error in Yanishevskiy balancemeters

SOURCE: AN SSSR. Mezhdudedomstvennyy geofizicheskiy komitet.
Meteorologicheskkiye issledovaniya, no. 15, 1966, 31-43

TOPIC TAGS: *HEAT BALANCE, RADIATION MEASUREMENT, ATMOSPHERIC RADIATION,*
A balancemeter, heat exchange, turbulent exchange,
pyrgeometer, radiation balance, sun shadow method, spectral range/
Yanishevskiy balancemeter.

STRACT: The paper presents an evaluation of error sources in Yanishevskiy balancemeters. The errors are caused by the instability of heat exchange between sensitive surfaces and the surrounding air, and the difference in sensitivity of balancemeter sides. Based on experimental data, it is shown that the main cause of "noise" (fluctuations of readings) of balancemeters is the thermal inhomogeneity of the surrounding air and the turbulent exchange associated with it. The turbulent heat exchange of dynamic origin does not cause essential variations of balancemeter readings. This made it possible to work out a simple method of graduating the operating balancemeters based on long-

Cord 1/2

ACC NR: AT6031970

wave radiation, using an identical balancemeter as the control instrument, which had been previously collated with the pyrgeometer or graduated in the black body. Elimination of the influence of balancemeter "noise" from the data is possible only by using balancemeters with artificial ventilation or by designing instruments with filters transparent in the long-wave spectral range. It is possible to reduce this influence by increasing the number of readings from 3 to 15—20. With a point registration or radiation balance, the number of points per hr for providing the necessary precision should be not less than 30—60. The measurement results are greatly influenced by the difference in sensitivity of balancemeter sides. If this difference is known, it can easily be taken into account during data processing. The difference in sensitivity of balancemeter sides to short-wave radiation can be easily determined by graduation with the sun-shadow method. The paper suggests a simple method for determining a similar difference in the long-wave spectral range. If the difference in sensitivity of sides is unknown, its influence can be avoided only by performing measurements with the balancemeter in two positions, the first and second sides facing upwards in turn. During processing of such readings, the influence of the sides is eliminated. Orig. art. has: 3 figures, 3 tables, and 22 formulas.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 008/ OTH REF: 001

Card 2/2

L 10687-65 EWT(1)/EWG(v) Pa-5/Pae-2 ASD(f)-2/APGC(b)/AFETR/AEDC(b)/
AFWL/SSD/ESD(t) GW

ACCESSION NR: AT4046362

S/2599/64/000/041/0186/0192

AUTHOR: Voly*nets, L.M., Zheleznyakova, T.V., Oleynik, R.N., Perolet, N.A.

TITLE: An attempt at recording the intensity of direct solar radiation in separate parts of the spectrum

SOURCE: Kiyev, Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Trudy*, no. 41, 1964. Voprosy*teplovogo i vodnogo balansa (Problems of heat and water balance), 186-192

TOPIC TAGS: actinometer, heliograph, spectroheliograph, solar radiation insolation

ABSTRACT: The authors constructed a spectroheliograph equipped with a type AT-50 actinometer and 6 filters. The 3-color recorder was a modified, 6-channel millivoltmeter of the MSSHch-pr type with a sensitivity of 10 mV full scale. Glass filters were switched in synchronism with the recorder channels by means of selsyns, a 6-minute cycle being used and allowing one minute between channels because of the inertia of the actinometer. The spectral results were reliable on cloudless days, but not on days of variable cloudiness because of the impossibility of measuring the entire spectrum simultaneously. The thickness of each filter was 3 mm and their response was checked with

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L 10687-65

ACCESSION NR: AT4046362

a quartz spectrophotometer. Corrections were made for transmission and reflection losses according to Berezkin's method, the complex transmission factors so obtained being tabulated. Hourly variations in the components of solar radiation were then plotted for a twelve-hour period, the components showing the same pattern as the integral flux. The spectral distribution obtained was in agreement with that previously found by Kalinin. There were large fluctuations in the overall flux, paralleled by variations in the components, but the available data were limited by the lack of sufficient clear weather. The long wavelength limit of each filter was 3000 m μ , and the short wavelength limits were 290, 431, 535, 578, 638 and 697 m μ , respectively, this range being considered adequate for all scientific purposes. Orig. art. has: 4 tables, 2 figures and 1 equation.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy gidrometeorologicheskiy institut, Kiev (Ukrainian Hydrometeorological Scientific Research Institute)

Card 2/3

L 10687-65

ACCESSION NR: AT4046362

SUBMITTED: 00

ENCL: 00

SUB CODE: ES, AA

NO REF SOV: 005

OTHER: 001

Card 3/3

KUMSKOV, V.T., kand. tekhn. nauk, dots.; POKALYUK, A. I., kand.
tekhn. nauk, dots.; PERELET, V.I., dots., retsenzent;
GRITSEVSKIY, M.Ye., ~~inzh.~~, red.; KHITROVA, N.A., tekhn.
red.

[Fuel and combustion processes] Toplivo i protsessy go-
reniya. Moskva, Transzheldorizdat, 1963. 191 p.
(MIRA 16:11)

(Fuel) (Combustion)

PERELETOV, A.

45-mm protivotankovaya pushka [45-millimeter antitank cannon]. Moskva, Izd-vo
VOENNAIA SSSR, 1952. 88 p.

SO: Monthly List of Russian Accessions, Vol 6 No 4, July 1953

PERELETOV, I. I., inzh.

Producing pumice by the continuous processing of slag fusions
on fixed grates. Stroi. mat. 6 no.9:13-15 S '60. (MIRA 13:9)
(Slag) (Aggregates (Building materials))

PERELETOV, I.I., inzh.

Method for the simultaneous determination of the effect of
temperature on a λ and C thermal insulators. Teploenergetika
7 no.2:77-80 F '60. (MIRA 13:5)

1. Moskovskiy energeticheskiy institut.
(Insulation (Heat))

PERELETOV, I.I., inzh.

Complex use of fused slags nonferrous metals. Prom.energ.
15 no.3:12-17 Mr '60. (MIRA 13:6)

1. Moskovskiy energeticheskiy institut im. Molotova.
(Slag) (Nonferrous metals--Metallurgy)

PERELETOV, I.I., kand. tekhn. nauk

Calculating the technological parameters of the pore-forming
process for slag melts involving the use of pulverized lime-
stone. Stroil. mat. 9 no.7:6-7 J1 '63. (MIRA 16:11)

67810

SOV/96-60-2-16/24

24,5100

AUTHOR: Pereletov, I. I., Engineer

TITLE: A Method of Determining Simultaneously the Temperature Conductivity (a) the Thermal Conductivity λ and the Specific Heat (c) of Heat Insulating Materials as Function of Temperature

PERIODICAL: Teploenergetika, 1960, Nr 2, pp 77-80

ABSTRACT: Articles by Krayev published in Teploenergetika Nr 4, 1956 and Nr 4, 1958 described an original method of investigating the temperature conductivity as a function of temperature. The idea was used by the present author to measure simultaneously the three thermo-physical characteristics of a material in a single test, the sample being heated or cooled at an arbitrary rate. Consider then the temperature field of a steadily-heated infinite hollow cylinder filled with the material whose properties are to be determined, the properties of the cylinder itself being known. The temperature field of such a cylinder consisting of two materials is then given by Eqs (1) and (2). Krayev gave a solution of Eq (1) as an infinite series of powers in the form of expression (3). If the conditions are right, the successive terms of this series diminish rapidly. In view of this,

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SOV/96-60-2-16/24

A Method of Determining Simultaneously the Temperature Conductivity
(a) the Thermal Conductivity (λ) and the Specific Heat (c) of Heat
Insulating Materials as Function of Temperature

expression (4) may be derived for the coefficient of temperature conductivity. Using the same approach as Krayev, a solution to expression (2) may be found in the form of expression (5). Then expression (15) is derived to determine the thermal conductivity. Having found the temperature and thermal conductivities, the specific heat may be determined by the usual expression (19). Corrections that must be applied when the temperature is not measured exactly on the axis of the cylinder are then explained. In order to verify the theory, the thermo-physical properties of Al_2O_3 powder were determined experimentally. The cylinder used had an internal diameter of 32.2 mm and was 300 mm high; it was filled with Al_2O_3 powder with a density of 800 kg/m^3 . Thermo-couples were fitted and the cylinder was heated externally. The experimental procedure is described and graphs of temperature and thermal conductivity as functions of temperature obtained by this method are plotted in

Card 2/3

67310

SOV/96-60-2-16/24

A Method of Determining Simultaneously the Temperature Conductivity
(a) the Thermal Conductivity (λ) and the Specific Heat (c) of Heat
Insulating Materials as Function of Temperature

Figs 1 and 2. These results were used to obtain a
curve of the specific heat of Al_2O_3 powder as a function 4
of temperature. It is plotted in Fig 3 which also
includes published data obtained by direct determinations.
The good agreement indicates that the proposed method
of determining all three thermo-physical constants
simultaneously is of satisfactory accuracy over a wide
temperature range. There are 3 figures and 2 Soviet
references.

ASSOCIATION: Moskovskiy energeticheskiy institut (Moscow Power
Institute)

Card 3/3

1ST AND 2ND ORDERS
 PROCESSED AND PROPERTIES INDEX
 3RD AND 4TH ORDERS

BT

13-10

Testing of wood for elongation along the fibres.
 L. M. FENNEMAN (Forest Lab., 1902, 7, 697-100).—
 Conditions of testing are specified. R. T.

450.51.5 METALLURGICAL LITERATURE CLASSIFICATION

PERELIGIN, N. S., BRUSOV, I. I. and SINITSIN, V. P.

"Anti-Aircraft and Anti-Chemical Defense," Kiev, 1955

BRUSOV, I.I.; PERELIGIN, N.S.; SINITSIN, V.P.; KUROCHKIN, F., redaktor;
PISARENKO, V., tekhnichnyy redaktor.

[Defense against air bombardments and chemical warfare. Translated
from the Russian] Protypovitrianyi i protykhimichnyi zakhyst. Pe-
reklad s rosijs'koi. Kyiv, Derzhavne vyd-vo tekhnichnoi lit-ry
URS, 1953. 108 p. (MLRA 8:2)
(Air defenses) (Chemical warfare--Safety measures)

SHIFRIN, K.S.; PEREL'MAN, A.Ya.

Determining the spectrum of particles of a disperse system
from its transparency characteristics. Part 1: Fundamental
equation for determining the spectrum of particles. Opt. i
spektr. 15 no.4:533-542 0 '63. (MIRA 16:11)

ACCESSION NR: AP4011493

S/0051/64/016/001/0117/0128

AUTHOR: Shifrin, K.S.; Perel'man, A.Ya.

TITLE: Determination of the spectrum of particles comprising a dispersed system from the data on its transmittance. 4. Scheme for computation of the particle spectrum when the transmittance data are specified in tabular form

SOURCE: Optika i spektroskopiya, v.16, no.1, 1964, 117-128

TOPIC TAGS: particle spectrum, dispersed system, scattering system, transparency, transmittance, distribution function, particle distribution function, polydispersed system

ABSTRACT: The present paper is the fourth in a series by the authors (K.S.Shifrin and A.Ya.Perel'man, Opt.i spektr.15,533,1963; Ibid.15,667,1963; Ibid.15,803,1963) devoted to calculation of the spectrum of the particles comprising a dispersed system on the basis of experimental data. In the present paper there is proposed a computation scheme for determining the spectrum of particles of any dispersed system from the experimental data on the transmittance. The computation formulas adduced and derived in the preceding papers are adopted to the present case. The computation

Cord 1/2

ACC.NR: AP4011493

scheme is relatively simple and its application does not require understanding of the mathematical formalism underlying the method. A number of illustrative examples are considered. The range of wavelength in which transparency data must be obtained in order to arrive at acceptable results is indicated. An evaluation of the accuracy of the computation scheme is given in the appendix. The advantage claimed for the proposed procedure as compared with other computation methods is that it yields a precise solution of the problem of determining the particle size spectrum from tabulated data on scattering without any a priori assumptions regarding the distribution. Orig.art.has: 87 formulas and 7 tables.

ASSOCIATION: none

SUBMITTED: 14Feb63

DATE ACQ: 14Feb64

ENCL: 00

SUB CODE: PH

NO REF SOV: 006

OTHER: 001

Card 2/2

8/0051/63/015/006/0803/0813

ACCESSION NR: AP4009465

AUTHOR: Shifrin, K.S.; Perel'man, A.Ya.

TITLE: Determination of the spectrum of particles in a dispersed system from the data on its transparency. 3. Use of the basic equation in the case of tabular (graphic) specification of the spectral transmittance

SOURCE: Optika i spektroskopiya, v.15, no.6, 1963, 803-813

TOPIC TAGS: transmittance, particle spectrum, dispersed system, spectrum calculations, scattering coefficient, Mellin transform, inverse Mellin transform

ABSTRACT: The present paper is the third of a series (Part I: Opt.1 spectr.15, 533, 1963; Part II: Ibid.15,667,1963) describing a method for calculating the spectrum of particles constituting a dispersed system from the spectral transmittance of the system. In the present paper there is considered the case when the transparency data are available in tabular or graphic form. The method is based on applying the Mellin transform to the transmittance data. There are analyzed the specific difficulties encountered in applying the Mellin transform to tabular data. There are derived formulas for calculating the particle spectrum on the basis of tabular or

Cord 1/2

AP4000465

graphic data. An appendix gives a derivation of the formulas for the inverse transformation for some typical functions. Orig.art.has: 72 formulas

ASSOCIATION: none

SUBMITTED: 14Feb63

DATE ACQ: 03Jan64

ENCL: 00

SUB CODE: PH,MM

NR REF SOV: 008

OTHER: 000

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Card

PEREL'MAN, F.M.; ZVORYKIN, A.Ya.; DEMINA, G.A.

Solubility isotherm (25°) in the system $\text{Nd}(\text{NO}_3)_3 - \text{RbNO}_3 - \text{H}_2\text{O}$.
Zhur. neorg. khim. 8 no.7:1753-1755 J1 '63.

(MIRA 16:7)

1. Institut obshchey i neorganicheskoy khimii imeni N.S.
Kurnakova AN SSSR.

(Neodymium nitrate) (Rubidium nitrate)
(Solubility)

VIKHROV, Viktor Yevgrafovich, prof.; PERELYGIN, L.M., otv.red.;
CHISTYAKOVA, O.N., red.izd-va; POLYAKOVA, T.V., tekhn.red.

[Identifying characteristics of the wood of species of prime
importance to forestry and the lumber industry of the U.S.S.R.]
Dagnosticheskie priznaki drevesiny glavneishikh lesokhoziaistven-
nykh i lesopromyshlennykh porod SSSR. Moskva, Izd-vo Akad.nauk
SSSR, 1959. 131 p. (MIRA 12:4)
(Wood--Anatomy)

PERELIZHNIY, F. YE.

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Biology-Study and Teaching

Organization of young naturalists' work. F. Ye Perelizhniy. Est v shkole No. 3.
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KAGAN, M., doktor tekhn.nauk; PEREL'MAN, inzh.

Pressure of grain on granary walls. Mak-elev.prom. 25 no.1:17-20
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1. Moskovskiy inzhenerno-stroitel'nyy institut imeni V.V.Kuybysheva (for
Kagan). 2. Moskovskiy inzhenerno-ekonomicheskoy institut imeni S.
Ordzhonikidze (for Perel'man).
(Grain--Storage)

L 9727-66 EWP(d)/EWP(v)/T/EWP(k)/EWP(h)/EWP(l)

ACC NR. AP5028190

SOURCE CODE: UR/0259/65/000/008/0019/0021

AUTHOR: Perel'man, A. (Engineer)

ORG: none

TITLE: An electronic dispatcher

SOURCE: Nauka i tekhnika, no 8, 1965, 19-21

TOPIC TAGS: industrial automation, computer application, production engineering, *automatic control equipment, electronic computer*

ABSTRACT: A system of industrial-operational planning and control of production by electronic computer has been developed and introduced into industry in the Soviet Union by the Laboratory of Planning Methodology and Organization of the Central Design and Planning Office for Mechanization and Automation, Council of National Economy of the Latvian SSR (Laboratoriya metodiki i organizatsii planirovaniya Tsentral'nogo proyektno-konstruktor'skogo byuro mekhanizatsii i avtomatizatsii Sovnarkhoza Latviyskoy SSR) jointly with the Computing Center of the Latvian State University, (Vychislitel'nyy tsentr Latviyskogo gosudarstvennogo universiteta). The system was tested and adjusted at the Riga Electric Machine Building Plant (Rizhskiy elektromashinostroitel'nyy zavod). This "electronic dispatcher" is now planning and controlling production operations at the "Sarkana zvaygzne" Plant (zavod "Sarkana Zvaygzne"), a diesel factory, and other enterprises. The author explains the continuous industrial-operational planning system. The essence of this system is the

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